

Ship Oct 28.

Work Order ID 138079

138079

Page 1

Item ID: D500-572-011

Accept

N900040100

Setup Start *NS1*

Revision ID:

Stop *NS2*

Item Name: Bearpaw

Start Date: 10/23/2015 Start Qty: 1.00

1

Cust Item ID:

Required Date: 10/28/2015 Req'd Qty: 1.00

1

Customer:

Reference:

Approvals: Process Plan: SH 20151023 Date: _____ Tooling: _____ Date: _____
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Run Start *NR1*

Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr	Revision Nbr
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D2435	Rev E1
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IIND500-572	RevA
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BAS
27
9-89

MJ 15-10-26

100	Document Control	0.00
-----	------------------	------

100

DC

DOCUMENT CONTROL

Memo

0.00

Doc.Control -USB or Paperwork

Photocopy bluefile and create labels per PPP D500-572-011 CHG005

DAS
28
9-89

OCT 26 2015

160

Pick Kit

0.00

160

Packaging

Memo

0.00

Packaging

BAS
27
9-89

OCT 26 2015

S

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval 		
Description Work Order Deviation				Disposition					
								Completed By	
								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	

Root Cause				FAULT CATEGORY							
Environment	☐	No Re-verification	☐	Pressure/Forced	☐	Temperature/Cure	☐	Power Loss/Surge	☐	Positioned Wrong	☐
Design	☐	Operator	☐	Bending	☐	Set-up	☐	Folio/Program	☐	Outside Dimensions	☐
Doc/Data	☐	Offset/Setup	☐	Centre Not Concentric	☐	BOM/Route	☐	Grain	☐	Over/Under tolerance	☐
Equip/Tooling	☐	Supplier	☐	Cracks	☐	Broken/Damage/Defect	☐	Weld	☐	Part Incorrect	☐
Handling/Pre	☐	Training	☐	Crimp/Kink/Ripple/Wave	☐	Inspection Incomplete/Unqualified	☐	Wrong Stock Pulled	☐	Part Lost/Missing	☐
Material	☐	Use for Testing	☐	Cuffs	☐	Contamination	☐	Out of Sequence	☐	Part Moved	☐
Internal Transport	☐	Poor Information	☐	Crushing	☐	Countersink	☐	Off-set	☐	Drawing	☐
Tribal Knowledge	☐	Rushing	☐	Heat Treat	☐	Cut Too Short	☐	Mislabeled	☐	Finish	☐
LOA	☐	Product Improvement	☐	Wave/Twist in Tube	☐	Instructions Incomplete/Unclear	☐	Fit/Function	☐	Misread	☐
Substation	☐	Process Improvement	☐	Marks/Chatter	☐	Drill Holes	☐	Misaligned/off center	☐	Turning Sequence	☐
Past Expiry Date	☐	Manufacturing Process	☐	OTHER : _____							
Misidentified	☐	Past Due	☐								

Work Order ID 138079

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138079

Page 2

Item ID: D500-572-011

Accept

N900040100Setup Start ***NS1***

Revision ID:

Item Name: Bearpaw

Stop ***NS2***

Start Date: 10/23/2015 Start Qty: 1.00

1

Cust Item ID:

Required Date: 10/28/2015 Req'd Qty: 1.00

1

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start ***NR1***

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
170	QC4- 100% Inspect kits for completeness	0.00							
170									
QC	Memo	0.00				1X		DAS 28 9-89	OCT 26 2015
Quality Control									
180		0.00							
180	Packaging								
Packaging	Memo	0.00				1X		DAS 28 9-89	OCT 26 2015
Packaging	Identify and pack for shipping as per PPPD500-572-011								
	LOCATION: FG012 <i>add</i>								
190	QC21- Final Inspection - Work Order Release	0.00							
190									
QC	Memo	0.00				ML3			OCT 27 2015
Quality Control									

ML3 OCT 27 2015

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval 		
Description Work Order Deviation				Disposition					
							Completed By		
							Lead hand / Supervisor Approval Verification		
							QC / QA Coordinator Approval		

Root Cause				FAULT CATEGORY							
Environment	☐	No Re-verification	☐	Pressure/Forced	☐	Temperature/Cure	☐	Power Loss/Surge	☐	Positioned Wrong	☐
Design	☐	Operator	☐	Bending	☐	Set-up	☐	Folio/Program	☐	Outside Dimensions	☐
Doc/Data	☐	Offset/Setup	☐	Centre Not Concentric	☐	BOM/Route	☐	Grain	☐	Over/Under tolerance	☐
Equip/Tooling	☐	Supplier	☐	Cracks	☐	Broken/Damage/Defect	☐	Weld	☐	Part Incorrect	☐
Handling/Pre	☐	Training	☐	Crimp/Kink/Ripple/Wave	☐	Inspection Incomplete/Unqualified	☐	Wrong Stock Pulled	☐	Part Lost/Missing	☐
Material	☐	Use for Testing	☐	Cuffs	☐	Contamination	☐	Out of Sequence	☐	Part Moved	☐
Internal Transport	☐	Poor Information	☐	Crushing	☐	Countersink	☐	Off-set	☐	Drawing	☐
Tribal Knowledge	☐	Rushing	☐	Heat Treat	☐	Cut Too Short	☐	Mislabeled	☐	Finish	☐
LOA	☐	Product Improvement	☐	Wave/Twist in Tube	☐	Instructions Incomplete/Unclear	☐	Fit/Function	☐	Misread	☐
Substation	☐	Process Improvement	☐	Marks/Chatter	☐	Drill Holes	☐	Misaligned/off center	☐	Turning Sequence	☐
Past Expiry Date	☐	Manufacturing Process	☐	OTHER : _____							
Misidentified	☐	Past Due	☐								

Picklist Print

October 23, 2015 11:18:41 AM

Page 1

Work Order ID: 138079

138079

Parent Item: D500-572-011

D500-572-011

Parent Item Name: Bearpaw

Start Date: 10/23/2015

Required Date: 10/28/2015

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP Rev:C04.02.17Blank size changedKJ/JLM
IPP Rev:D 07-01-02 Was K10007 JLM
IPP Rev:E 08-01-09 Added Step 2 JLM Verified By:EC
IPP Rev:F 08-10-15 New Manufacturing Method JLM Verified By:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	-------------	--------------	---------------	----------------	--------

QS200-M44S

Purchased

No

120

Each

38.0000

2

2

DAS

27

9-89

QS200-M44S

CLAMP

DAS
28
9-89

Location

Loc Qty

Loc Code

ST545

38

~~m131340~~

18

m133363

20

AN4-15A

Purchased

No

170

Each

212.0000

8

8

DAS

27

9-89

AN4-15A

Bolt

DAS
28
9-89

Location

Loc Qty

Loc Code

GA

40

120449

40

ST325A

100

m132551

0

m133284

100

ST343

72

m132551

72

D2182B

Manufactured

No

170

f

618.9283

1.666

1.666

DAS

27

9-89

D2182B

Rubber Cushion - Black (\$Per Foot)

DAS
28
9-89

Location

Loc Qty

Loc Code

ST411

618.9283

130427

268.9283

135093

350

(D2182B050) cut 4 at 5.00"

OCT 26 2015

Picklist Print

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Page 2

Work Order ID: 138079

Parent Item: D500-572-011

Parent Item Name: Bearpaw

138079

D500-572-011

Start Date: 10/23/2015

Required Date: 10/28/2015

Start Qty: 1.00

Required Qty: 1.00

D2274

Manufactured No

170

Each

205.0000

8

8

D2274

Radius Block

BAS

27

9-89

DAS
28
9-89

Location

Loc Qty

Loc Code

FG

12

86855

12

ST006

193

127579

4

~~134217~~

40

136600

149

8

D2435

Manufactured No

170

Each

4.0000

2

2

D2435

Bearpaw

DAS
28
9-89

Location

Loc Qty

Loc Code

PKG

4

128312

4

2

D2438

Manufactured No

170

Each

70.0000

4

4

D2438

Clamp

BAS

27

9-89

DAS
28
9-89

Location

Loc Qty

Loc Code

ST

4

110276

4

ST542

66

~~128921~~

16

131052

50

4

OCT 26 2015

Picklist Print

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Page 3

Work Order ID: 138079

138079

Parent Item: D500-572-011

D500-572-011

Parent Item Name: Bearpaw

Start Date: 10/23/2015

Required Date: 10/28/2015

Start Qty: 1.00

Required Qty: 1.00

D2529

Manufactured No

170 Each

699.0000 8 8

D2529

Washer

DAS
27
9-89

DAS
27
9-89

DAS
28
9-89

Location

Loc Qty

Loc Code

ST007

2

131945

2

ST008

197

135846

97

136774

100

ST012a

500

137534

500

MS21042L4

Purchased No

170 Each

2,760.000 8 8

MS21042L 4

Locknut

DAS
27
OCT 26 2015
9-89

DAS
27
9-89

Location

Loc Qty

Loc Code

CCK004

2000

m133363

2000

FP001

2

m124231

2

GA

67

m127813

67

ST260a

138

m130799

56

m131803

6

m132262

76

ST305

553

m128300

8

m130388

7

m130922

97

m131618

12

m132123

56

m132382

273

m133316

100

DAS
28
9-89

8

October 23, 2015 11:18:41 AM

Shop Packet Print

Page 3

Picklist Print

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Page 4

Work Order ID: 138079

138079

Parent Item: D500-572-011

D500-572-011

Parent Item Name: Bearpaw

Start Date: 10/23/2015

Required Date: 10/28/2015

Start Qty: 1.00

Required Qty: 1.00

NAS1149D0463J

Purchased

No

170

Each

5,538.000

8

8

NAS1149D0463.J

WASHER

DAS

27

9-89

OCT 26 2015

DAS
28
9-89

Location

Loc Qty

Loc Code

GA

626

M129390

41

M132035

585

ST260a

3470

M133284

1970

M133316

1500

ST269

1442

M129682

47

M130799

371

M132317

101

M132677

888

M133077

35



RELEASED
19.06.17 KE

DESIGN	DRAWN BY	DART AEROSPACE LTD	REV. E
KE	KE	HAMKESBURY, ONTARIO, CANADA	
CHECKED	APPROVED	DRAWING NO.	SHEET 1 OF 2
KE	KE	D2435	
DATE	TITLE	SCALE	
98.05.19	BEARPAW	1:5	
A	96.01.24	NEW ISSUE	
B	96.03.26	CHANGE BORE AND C'BORE DEPTH	
C	97.05.07	CHANNEL & C'BORE DEPTH CHANGED	
D	97.10.17	R1.5 BORE WAS R2.637 (TSR A469)	
E	98.05.19	CHANGE C'BORE, R1.58 WAS R1.50	

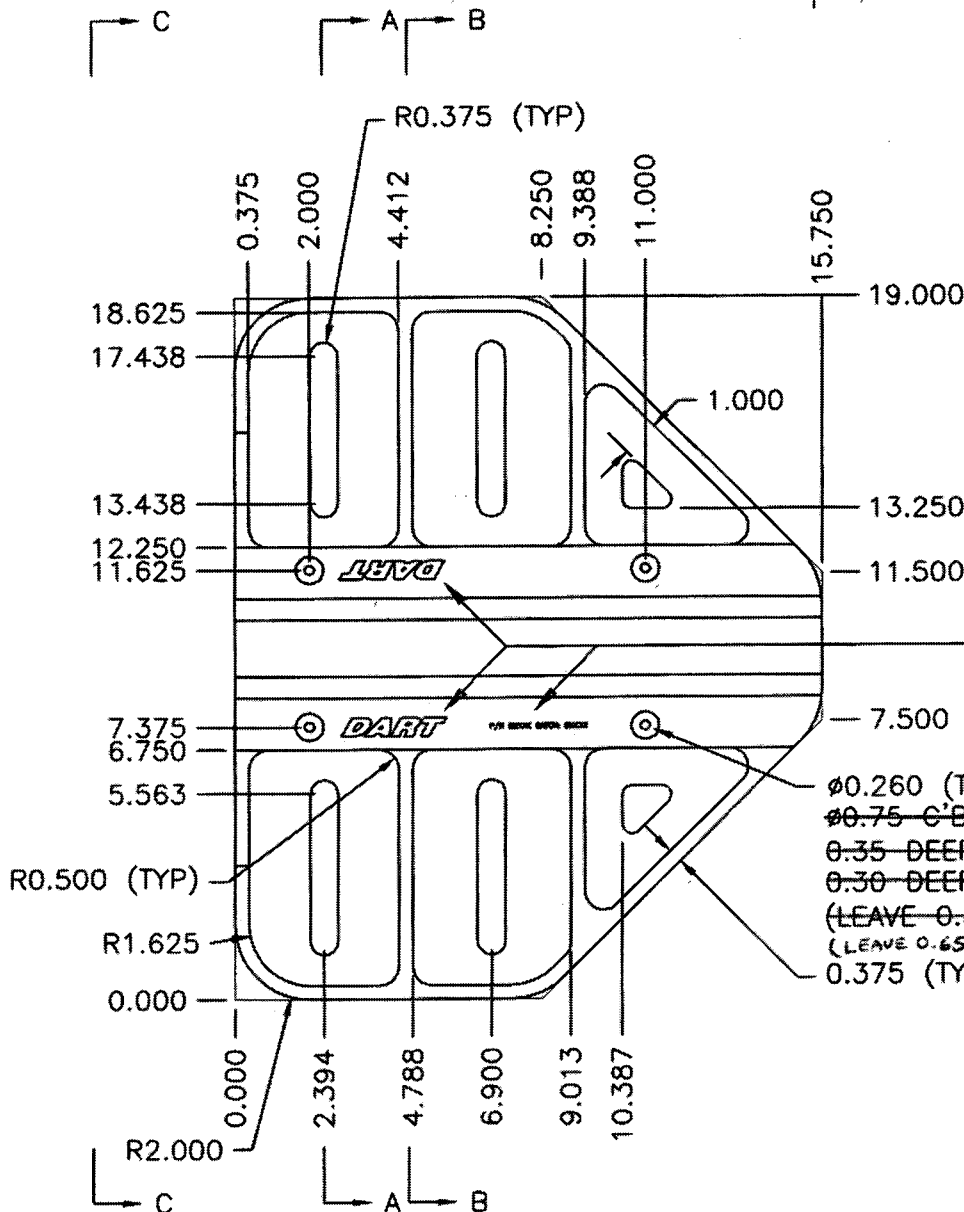
ENGRAVE LOGO TO MAX DEPTH OF 0.012. ENGRAVE PART AND BATCH NUMBERS TO MAX DEPTH OF 0.010. (TYPICAL LOCATION AS ILLUSTRATED)

20151023 SK
138079.

9143	
------	--

EFFECTIVE DEOS

E1 02.12.17 $\phi 0.93$ WAS $\phi 0.75$ ~~FEA~~



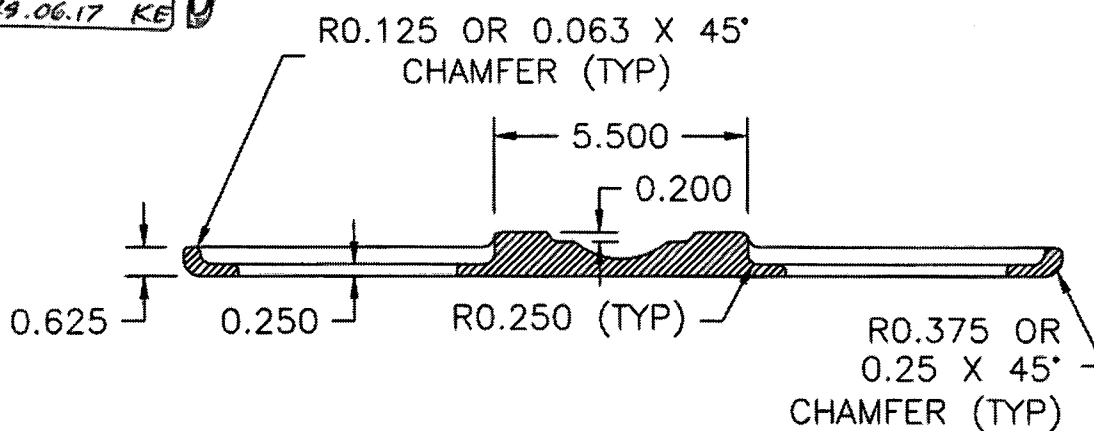
$\phi 0.260$ (TYP) $\phi 0.93$ C'BORE
 $\phi 0.75$ C'BORE 0.30 DEEP FROM BOTTOM
0.35 DEEP FROM TOP (MIN.)
0.30 DEEP FROM BOTTOM.
(LEAVE 0.300 MIN.)
(LEAVE 0.650 MIN.)
0.375 (TYP)

MATERIAL: UHMW BLACK PER SPEC CONTROL DRAWING D2689
1.00 THICK (MACHINE TO 0.950)

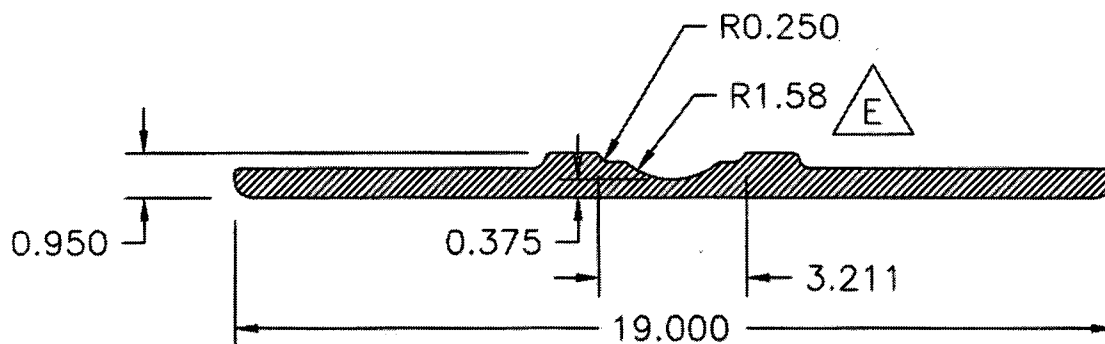


DESIGN <i>KE</i>	DRAWN BY <i>KE</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>MB</i>	APPROVED <i>KE</i>	DRAWING NO. D2435	REV. E SHEET 2 OF 2
DATE 98.05.19		TITLE BEARPAW	SCALE 1:4

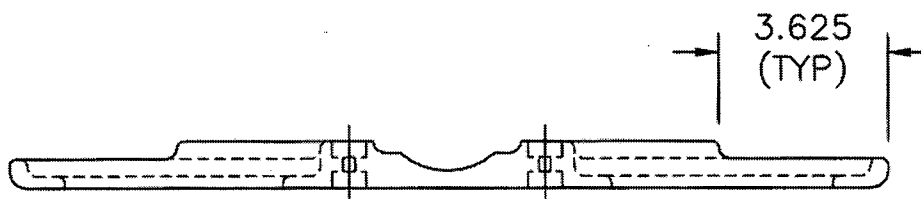
RELEASED
99.06.17 KE



SECTION A-A



SECTION B-B



SECTION C-C

DAS
28
9-89

4. WEIGHT AND BALANCE

Installation	Weight	LATERAL		LONGITUDINAL	
		Arm	Moment	Arm	Moment
D500-572-011 Bearpaw Installation	8.5 lb 3.86 kg	0.0 in 0.0 m	0.0 lb-kg 0.0 m-kg	130 in 3.30 m	1105 in-lb 12.74 m-kg
D500-572-021 Narrow Bearpaw Installation	7.5 lb 3.41 kg	0.0 in 0.0 m	0.0 lb-kg 0.0 m-kg	130 in 3.30 m	975 in-lb 11.25 m-kg
D500-572-013 Bearpaw Installation	11.4 lb 5.17 kg	0.0 in 0.0 m	0.0 lb-kg 0.0 m-kg	128 in 3.25 m	1459 in-lb 16.80 m-kg
D600-572-015 Bearpaw Installation	11.4 lb 5.17 kg	0.0 in 0.0 m	0.0 lb-kg 0.0 m-kg	122 in 3.10 m	1391 in-lb 16.03 m-kg

5. PARTS LIST

Qty D500 -572 -011	Qty D500 -572 -021	Qty D500 -572 -013	Qty D600 -572 -015	Part Number	Description
X				D500-572-011	BEARPAW INSTALLATION
	X			D500-572-021	NARROW BEARPAW INSTALLATION
		X		D500-572-013	BEARPAW INSTALLATION
			X	D600-572-015	BEARPAW INSTALLATION
2				D2435	BEARPAW
	2			D2671	BEARPAW
		2		D2995	BEARPAW
			2	D2996	BEARPAW
4	4	4		D2182B050	RUBBER CUSHION
			4	D2182B060	RUBBER CUSHION
8	8	8	8	D2274	RADIUS BLOCK
4	4	4		D2438	CLAMP
			4	D2519	CLAMP
8	8	8	8	D2529	WASHER
		8	8	AN4-13A	BOLT
8	8			AN4-15A	BOLT
8	8	8	8	AN960JD416	WASHER
8	8	8	8	MS21042L4	NUT (OR MS21042-4)
2	2			QS200M44S	CLAMP
			4	QS100M24S	CLAMP

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Revision: A

Date: 01.02.21